



**RANCHERS EXPLORATION AND DEVELOPMENT CORPORATION**

Box 6217 / 1776 Montano Road, N.W. / Albuquerque, New Mexico 87197  
Telephone (505) 344-3542 / TWX 910 989 1688 RANC EXPLO ABQ

September 4, 1980

Mr. James W. Smith, Jr.  
Coordinator of Mined Land Development  
Division of Oil, Gas, and Mining  
Utah Department of Natural Resources  
1588 West North Temple  
Salt Lake City, UT 84116

Subject: Tentative Approval, Escalante Silver Mine ACT/021/004

Dear Mr. Smith:

With reference to your tentative approval for the Escalante as outlined in your letter of August 22, 1980, and the stipulation therein, I am submitting information that I trust will meet your requirements.

If you have any further questions, please feel free to contact me.

Sincerely,

Mark R. Welch  
Chief Engineer

MRW/nm

Enclosures

cc: Jim Rosel  
Herb M. Campbell  
David K. Hogan





## **RANCHERS EXPLORATION AND DEVELOPMENT CORPORATION**

Box 6217 / 1776 Montano Road, N.W. / Albuquerque, New Mexico 87197  
Telephone (505) 344-3542 / TWX 910 989 1688 RANC EXPLO ABQ

September 4, 1980

The following information is submitted in response to the stipulations outlined in a letter from the Utah Division of Oil, Gas, and Mining to Ranchers dated August 22, 1980.

1. Estimated volumes of stockpiled topsoil (sandy-silt) are approximately as follows:

Mill site area (6" soil)	7,700 cy
Coarse ore pile (3" soil)	3,300 cy
Admin. complex (6" soil)	3,700 cy
Waste rock area (4" soil)	4,400 cy
Tailings area (6" soil)	<u>59,300 cy</u> (ultimate)
TOTAL	78,400 cy

The above stockpiled materials are to be evenly replaced over the disturbed areas as best as possible, to a depth that will support plant life. An average of 4" is anticipated.

2. Reference is made to US Forest Service Publication "User Guide to Vegetation, Mining and Reclamation in the West", General Technical Report INT-64, dated November 1979, as well as Bulletin 500, Utah Agricultural Experiment Station, "Selection, Propagation, and Field Establishment of Native Plant Species on Disturbed Arid Lands".

The recommended procedures for regrading, backfilling, and compaction as outlined in the referenced publications are to be utilized where practical. In essence, the previously-stockpiled topsoil is to be reclaimed with scrapers. The scrapers will spread the topsoil over the disturbed areas, and detailed grading will be done with dozers, following along the contours. After the topsoil is re-spread and graded, it will be disced and tilled, and appropriate fertilizers and soil amendments will be added, followed by re-seeding the suitable species of plants.

The reclamation and recontouring will begin, depending on the season and weather, within two months of termination of operations. It is expected that one month will be required to spread the topsoil. Then, depending upon the season and weather, the suitable native species will be propagated and maintained until they are self-sufficient. Ranchers will engage suitable consultants, as appropriate, to assist us in reclamation of the disturbed areas.

3. All vertical and inclined openings into the mine are to be positively sealed from unauthorized access upon termination of operations.

The existing inclined shaft, being used for exhaust air and secondary escape, is to be bulkheaded off with 12" x 12" steel beams. A load of rock is to be placed on top of the beams.

The second vertical escape and exhaust air shaft is to be sealed in a similar manner.

The -14% decline is to be sealed with timbers and steel in a manner that only authorized access through a personnel door can be accomplished. It is to be locked with several padlocks, and the door itself will be of heavy duty construction.

4. The tailings pile will be reclaimed as practically as possible in a manner similar to that outlined in paragraph 2 above. The tailings dam has been designed so that it can accept all runoff waters in the area during periods of maximum probable floods without any spillage or overflows. Flood waters will then evaporate. Excess freeboard has been designed into the facility just for this purpose. However, intercept ditches above the tailings pond will be used to divert runoff waters as additional measures.

*Are the tailings  
topic + well  
there be any  
chance these  
will be  
evaporable  
upon final  
reclamation?*

*this  
is  
during  
operations?*

*75% cover!!!  
what  
grasses  
Big sage other  
shrubs?*

5. The dam embankments will be protected from erosion using Celtite binder sprays designed for this purpose. When the binder is sprayed on the embankment, mulch, fertilizer, and seed will be added to the spray. This technique has proved quite successful in other similar situations and climates.

*claiming  
75%  
original  
cover!  
52.5%  
reclaimed  
cover*

6. The existing vegetation consists predominantly of sagebrush and some native grasses. Based on field observations and counts from photographs, the sagebrush constitutes about 25% of the aerial cover, with grasses and other shrubs constituting around 50% of the aerial cover.

*Is this  
adequate  
many shrubs?*

7. See the references in paragraph 2 above. In particular, the US Forest Service General Bulletin recommended procedures are to be followed with regards to the planting programs. The mixture of grass, shrub, and forb seeds will be in accordance with the references in paragraph 2 and in accordance with the recommendations of the Division.

8. The annual evaporative losses from the exposed surface waters vary from pumping phase to pumping phase. The evaporation from the minimum and maximum pumping phases are calculated below. Another governing factor is the amount of water delivered into the north canal that can be beneficially used by farmers.

8.a. Ranchers commits to monitoring post-mining recovery of the regionally affected aquifer until such time that sufficient data is documented to substantiate aquifer reestablishment, to the normal predicted level or one year, whichever is sooner.

b. Ranchers also will continue to provide appropriate measures of replacement and/or renumeration, as specified in its notice of intention, to adversely affected parties until such time as 8a above.

*Have not  
changed  
their stand*